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ABSTRACT

This report presents the results of followup studies concerning participants' attitudes and reactions to two courses delivered during the experimental phase of the Appalachian Education Satellite Project (AESP). Graduate level teacher training was the objective of the courses, entitled Diagnostic and Prescriptive Reading Instruction and Career Education for Secondary Teachers. Participants were asked to indicate the extent to which they had been able to implement techniques taught in the courses and to react to various components of course structure and administration. The report also provides research methods including subject data and instrumentation, research conclusions, and effects of the study on subsequent course revisions. (Author/STS)

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FOLLOW-UP STUDIES OF THE APPALACHIAN EDUCATION SATELLITE PROJECT EXPERIMENTAL PHASE

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The purpose of this series is to document and disseminate information about the design, implementation and results of the AESP experiment.

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INTRODUCTION

In 1974 the Appalachian Education Satellite Project (AESP) began delivery of a series of courses via satellite to remote sites in Appalachia. The project was designed as an experiment to determine the feasibility of delivering courses via satellite to sparsely populated areas in Appalachia. The Applications Technology Satellite, ATS-6, launched by the National Aeronautics and Space Administration (NASA) in May of 1974 was used to transmit audio and video portions of four graduate level teacher training courses in career education and diagnostic and prescriptive reading to nearly 1,200 teachers in eight Appalachian states. The results of this experimental period are documented in a series of AESP technical reports. (See AESP Technical Reports #3-9, 11 and 12.)

Following this successful demonstration phase, AESP entered a new planning stage, designed to provide the basis for an expansion of AESP services to Appalachia through the use of satellite technology.

A primary focus of this planning stage was an assessment of needs throughout the Appalachian region. This needs assessment has served as a basis for AESP programming in 1977, and will continue to act as a basic reference for the future directions of the Appalachian Education Satellite Project. Results of this needs assessment are documented in AESP Technical Report #14.

Another focus of the planning stage has been a concern with evaluating and building upon the experience of the course deliveries during the experimental phase. Results of formative and summative evaluations conducted

during course deliveries were used as the basis for these efforts. In addition, two follow-up studies of course participants were conducted with the goals of obtaining feedback for course revision given the participants' opportunities to implement techniques taught in the course in the field. Participants were asked to indicate the extent to which they had been able to implement various techniques taught in the course and to react to various components of the course structure and administration. In addition, a follow-up measure of student attitudes toward the subject matter of the course was obtained for purposes of comparison with pre- and post-instruction measures.

The specific research questions toward which these studies were addressed and their results are presented in the following sections. Section two details the results of the follow-up study on the diagnostic and prescriptive reading course while section three concerns the follow-up study on the career education course delivery.

DIAGNOSTIC AND PRESCRIPTIVE READING INSTRUCTION

Introduction

This section will describe the results of a follow-up study conducted with participants in a course in reading instruction delivered by the Appalachian Education Satellite Project (AESP) in the spring of 1975. The study was conducted as part of the planning effort for an expansion of AESP services to Appalachia. The specific purposes of the study were (a) to measure participants' attitudes concerning reading instruction one year and six months following the completion of the course and, (b) to obtain feedback on both the effectiveness of various instructional components of the course and the implementation of the techniques in the classroom. The results of this data were then used in revising the course for delivery over the AESP system in the spring of 1977.

The course, entitled Diagnostic and Prescriptive Reading Instruction, was produced by the Appalachian Education Satellite Project (AESP) for television broadcast via satellite to sites in the Appalachian region. The course was designed in response to a survey conducted by the Appalachian Regional Commission (ARC) in 1971 which indicated that reading education was viewed as a vital in-service need by teachers in Appalachia. AESP, through the use of the ATS-6 and ATS-3 educational satellites, was able to transmit the course to fifteen remote sites at participating Regional Education Service Agencies (RESAs) affiliated with AESP. (See AESP Technical Reports #6 and #12 for site by site participation.)

The Diagnostic and Prescriptive Reading course was first delivered on an experirental basis in the summer of 1974. (See AESP Technical Reports #6 and #8 for reports of this delivery.) The course was revised based on that experience for delivery in the spring of 1975. The spring 1975 Diagnostic and Prescriptive Reading course was designed to instruct teachers in specific techniques for diagnosing student's reading problems and devising individual prescriptive instruction for students based upon these diagnostic techniques. Dr. Lowell Eberwein, Associate Professor in the Department of Educational Curriculum and Instruction at the University of Kentucky, was instrumental in the development of the course curriculum and served as the instructor of the course.

The course consisted of four basic instructional components:

1) Seventeen 30-minute videotaped lessons, portions of which were filmed in schools throughout Appalachia to demonstrate the practical application of diagnostic and prescriptive reading methods;
2) Twelve four-channel audio review segments, consisting of multiple-choice questions covering the material presented in the videotaped lessons;
3) Ancillary or laboratory materials associated with each lesson. These consisted of reading materials, discussion groups, and game activities designed to assist the participant in the application of the principles and techniques demonstrated in the videotaped lessons.

4) Five, hour-long live seminars in which participants at the sites were able to interact with a panel of experts in the field of reading concerning a particular aspect of the course curriculum. Participants' questions were transmitted to the panel in Lexington, Kentucky by teletype and were answered on screen through use of the ATS-6 satellite.

A complete description of the design of these instructional components for the spring 1975 course may be found in AESP Technical Report #12.

A new feature of the course curriculum in the spring of 1975 was the opportunity for participants to select one of three options for course credit: a K-3 program, a 4-6 program, or a K-6 program. The participant then selected 13 of the 17 videotaped lessons and associated ancillary and audio review activities to complete based upon the particular option he or she selected.

Summative evaluation data concerning the affective and cognitive gains as well as ratings of the different instructional components of the course by the 282 students who completed the final exam are detailed in Technical Report #12. The follow-up study to be described here was designed to measure participants' reactions to the course having had the opportunity to implement specific techniques in the field.

Method

Subjects

Evaluation instruments were mailed to the 282 students who had completed all course requirements for the spring 1975 course delivery. Instruments were returned in an addressed, stamped envelope to the local site coordinators; these site coordinators acted to follow-up on unreturned forms. Packets were then mailed by the field representatives to the Resource Coordinating Center (RCC) at the University of Kentucky. The return rate was 21% with 59 packets returned to the RCC; this sample of participants served as the subjects for the follow-up study. Seven of these subjects were dropped for the analysis of attitudes toward reading due to incorrect completion of the instrument.

Table 1 illustrates the number of students from each site who participated in the follow-up study. The sample is subject to bias both by overall return rate and by site distribution; and may not be viewed as a random sampling of course participants.

Instruments

Teacher Attitudes Toward Reading Instruction (TARI). This instrument consisted of 21 items designed to measure participants' attitudes toward particular theories and techniques of diagnostic and prescriptive reading. Questions covered such topics as the utility of contingency contracting, informal testing, and "free reading" times. (See Appendix 1 for a copy of this instrument.)

TABLE 1

DISTRIBUTION OF FOLLOW-UP PARTICIPANTS BY SITE: DPRI

Site	Number of Participants Completing Course	Number Participating in Follow-Up Study
Fredonia, NY	20	5
Olean, NY	21	6
Edinboro, PA	14	4
LaFollette, TN	27	0
Coalfield, TN	17	0
Johnson City, TN	19	0
Norton, VA	11	1
Stickleyville, VA	15	2
Boone, NC	18	4
Cumberland, MD	21	8
Keyser, WV	19	7
McHenry, MD	19	6
Huntsville, AL	27	6
Guntersville, AL	19	8
Rainsville, AL	15	2
	N = 282	N = 59

Items from this scale were selected on the basis of factor loadings on a factor analysis with VARIMAX rotation on the post-course administration of the original 27-item instrument. The factor analysis revealed a uni-factor structure with the first factor accounting for 70% of the estimated common variance; all items with factor loadings less than .30 were deleted leaving 21 items on the scale.

Participants responded to the instrument on the basis of an eight-point Likert scale with 1 = completely disagree and 8 = completely agree. Responses to the items were totaled, with negative items being reversed, to obtain a single score for each participant.

This instrument was administered as a pre- and post-instruction of attitude change during the delivery of the reading course. The administration of the instrument in the follow-up study thus permitted comparison across administrations to examine changes in attitude toward diagnostic and prescriptive reading techniques over time.

Special Questions Form. This instrument consisted of 18 open-ended items designed to gain information concerning (a) participants' use of various diagnostic and prescriptive reading techniques in their classrooms, and (b) their attitudes toward certain instructional components of the diagnostic and prescriptive reading course. (See Appendix 2 for a copy of this instrument.)

Responses to this instrument were used as a basis for revising the diagnostic and prescriptive reading course. Comments and suggestions for course revision were encouraged on the instrument.

Results

The follow-up study for diagnostic and prescriptive reading instruction was designed to investigate three specific research questions:

- How had participants' attitudes toward diagnostic and prescriptive reading instruction changed over time given the opportunity to implement the techniques in their classroom?
- How did participants feel about specific instructional components of the reading course one year and six months after completion and what suggestions did they have for revision?

- Had participants been able to implement techniques they had learned in the course in their classrooms and which techniques had proven most successful in this process?

Attitudes Toward Reading Instruction

In order to obtain answers to the first research question concerning participants' attitudes toward diagnostic and prescriptive reading, data from the Teachers' Attitudes Toward Reading Instruction instrument were analyzed in a multivariate analysis of variance (MANOVA) design. As the AESP reception network consists of five RESA triangles each containing three reception sites, data were analyzed with a factor for triangles and a factor for sites nested within triangles. This design is consistent with previous analyses of AESP courseware delivery and in keeping with previous findings of significant differences for sites nested within triangles. The third factor in the multivariate analysis of variance design consisted of a repeated measures factor for the three administrations of the attitudinal instrument (pre, post, and follow-up).

Results of the multivariate analysis for 4 triangles by 3 sites within triangles by 3 administrations are presented in Table 2. (Only 4 triangles were included in the follow-up analysis as no forms were returned from the Tennessee RESA triangle.) A significant main effect was found for administrations ($p < .01$), but not for triangles or sites within triangles. Only the linear trend for administrations was significant. Inspection of the data indicates that scores on the attitude measure rose in a linear fashion from pre-course to post-course and maintained this level at the follow-up 18 months later. This trend is graphically depicted in Figure 1.

TABLE 2

MANOVA FOR PRE-, POST-, AND FOLLOW-UP ADMINISTRATIONS
OF THE AFFECTIVE INSTRUMENT FOR DPRI COURSE
N=52

Source	df	MS	F	p<
Between Subjects	52			
Triangles (T)	3	3.14	1.90	n.s.
Sites within Triangles (S:T)	8	1.65	.96	n.s.
Error Between	40	1.72		
Within Subjects	104			
Administrations - Linear (A_L)	1	3.69	12.95	.0001
Administrations - Quadratic (A_Q)	1	1.17	3.49	n.s.
A_L x T	3	.21	.87	n.s.
A_Q x T	3	.07	.24	n.s.
A_L x S:T	8	.24	.84	n.s.
A_Q x S:T	8	.30	.89	n.s.
Error within (linear)	40	.28		
Error within (quadratic)	40	.33		

Mean item scores on the eight-point Likert scale rose from a pre-course of 6.86 to a post-course mean of 7.21 and a follow-up mean of 7.22.

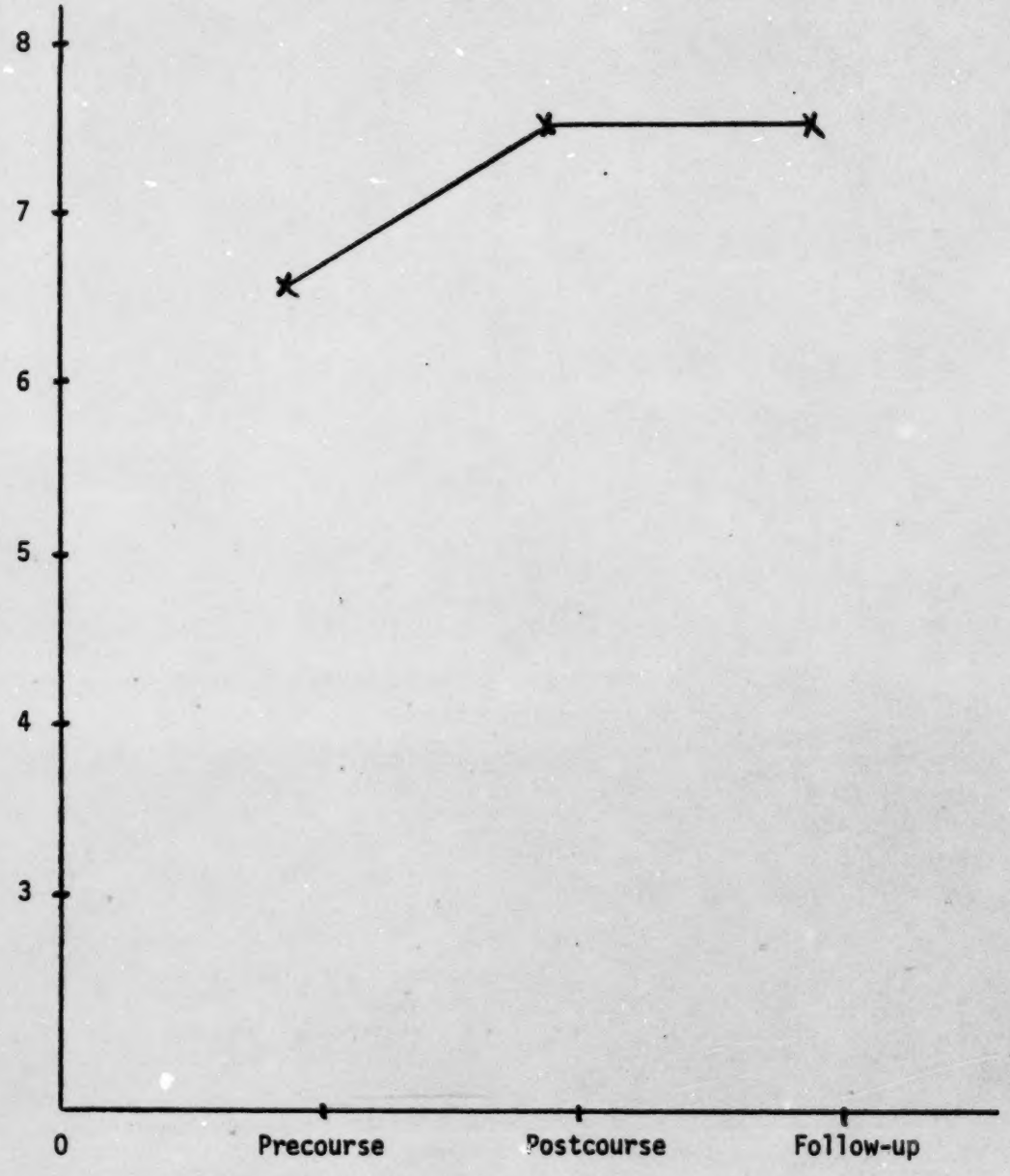

Fig. 1 -- Mean Item Scores for Three Administrations of Attitude Toward Reading Instruction Instrument (N=52)

Special Questions Form

Responses to the Special Questions Form were analyzed in reference to the final two research questions concerning participants' implementation of diagnostic and prescriptive reading techniques in the classroom and their comments and suggestions for revision of certain instructional components of the course. As the items on this form were generally open-ended, responses were analyzed through tabulation of certain categories of responses rather than through standard statistical procedures. Hence, results are reported in these terms with representative comments cited.

Implementation of diagnostic and prescriptive reading techniques. Items on the Special Questions Form which pertained to implementation of specific diagnostic and prescriptive reading in the classroom indicated that an overwhelming number of the respondents felt that they had learned many skills that were useful in their present job. Ninety percent of the respondents selected this alternative on item 2 of the Special Questions Form. Only one respondent felt she had not learned useful skills from the course; 7% of the respondents indicated that they had learned useful skills, but the skills were not applicable to their present position.

Item 3 concerned the frequency of application of these techniques in the classroom. Again, a majority of respondents indicated they used the techniques often (58%) with a smaller number indicating they used the techniques occasionally (30%). Nine respondents were not currently teaching and, therefore, did not respond as to their frequency of use of the technique.

Items 4, 5 and 6 were concerned with which techniques were particulary useful or conversely, were of little use or difficult to implement. Virtually

the entire range of techniques taught in the course were being used by some respondents as indicated by written comments. However, the most frequently used techniques were various types of informal reading inventories or skill testing (31% specifically mentioned these techniques) and the Wisconsin Design for Reading Skill Development: Word Attack (22% specifically mentioned using this instrument). Other techniques being used included skill games, resource files, free reading periods, contingency contracting, comprehension activities, and general diagnostic testing procedures.

In commenting on the effectiveness of these techniques, many of the respondents were enthusiastic and expressed the feeling that the techniques had worked very effectively. Fifteen respondents specifically mentioned that their students showed more interest and/or confidence in reading following the implementation of diagnostic and prescriptive reading techniques. Others cited better reading scores on the part of their students on standardized achievement tests and greater interest in reading books from the library as evidence of the effectiveness of the various techniques.

The only technique which was cited more than once as being of little use or difficult to implement was the Reading Miscue Inventory. Nine respondents cited this instrument as being too time-consuming for regular classroom teachers. The Reading Miscue Inventory had also received low ratings in the summative evaluation. Seven respondents cited difficulties in the implementation of various techniques due to an inability to obtain specific materials or inventories through lack of financial or administrative support in the school system.

The final item concerning implementation of the course curriculum dealt with the use of ideas generated by other teachers in the course during the discussion activities (item 7). Eighty-one percent of the respondents to this item indicated they did make use of techniques suggested by other teachers. A variety of reading games and teaching aids were named as examples. Many respondents mentioned the interaction and exchange of ideas with other teachers as a most valuable part of the course. This finding is consistent with findings from earlier course deliveries indicating that opportunities for small group discussions and interaction with other teachers was considered one of the most beneficial aspects of the on-site ancillary activities. (See AESP Technical Reports #6 and #12.)

In summary, it appears that most of the respondents had been able to implement some of the diagnostic and prescriptive reading techniques in their classrooms and had positive feelings concerning the effectiveness of these techniques.

Attitudes toward instructional components of the diagnostic and prescriptive reading course. Items eight through eighteen on the Special Questions Form were concerned with participants' opinions of various aspects of the instruction and their suggestions for revision. The overall course rating was positive with 80% of the respondents responding "yes" to the statement, "Knowing what you know about the quality and procedures of the course, would you sign up for it now if you had not already taken it?" Only 5% of the respondents answered "no," while 15% responded with a "qualified yes, if certain changes were made." Changes expressed by these respondents included better reception, less course work or more time to complete the

course, better organization and information from site coordinators, and less inappropriate questioning of panelists during seminars.

A small minority of respondents felt the course to be an impersonal experience. In responding to the question "Do you feel the course was an impersonal experience?" 22% of the respondents checked "strongly agree" or "moderately agree" while 64% checked "moderately disagree" or "strongly disagree". Fourteen percent of the respondents checked the neutral alternative. While these responses indicate general satisfaction with the personal level of the course, the number of respondents expressing dissatisfaction suggest some problems in this area. Suggestions for improvement included a visit to sites by the course instructor to allow some face-to-face contact and more time for group discussion on-site to maximize personal interaction. Those who were satisfied with the level of personalization commented on aspects of the course which contributed to this component. The following comments are representative of those received.

"This is the best way to reach so many people. The coordinator provided the personal experience."

"The TV allowed students to see others teaching; this could not have been done in a regular course."

"The question periods (seminars) and discussions helped personalize the course."

"The video instructor personalized the lectures effectively."

"How often do you <u>really</u> ever get to talk to your instructor anyway?"

A majority of respondents felt that the use of the satellite for course delivery was better than a course delivered by television or a traditional course with a live instructor. In comparing satellite delivery to regular television, 48% of the respondents felt the satellite delivery was somewhat or much better while 48% felt both were about the same. Only 3% of the respondents felt a regular television course would have been somewhat better than the satellite delivery. Fifty-four percent of the respondents felt the satellite delivered course was somewhat or much better than listening to a live instructor, while 46% felt they were about the same. These reactions are similar to findings during the experimental phase in which satellite-delivered courses were viewed by participants as equal or superior to traditional modes of instruction.

Respondents were also asked to react to two specific instructional components of the course: the interactive seminars and the role of the site coordinators. The summative evaluation of interactive seminars had revealed that, although participants responded positively to the seminars, they were one of the least liked instructional components when compared to other course activities. (See AESP Technical Report #12.) While participants believed that the interactive seminars were valuable, they felt the seminar time was not put to optimal use. Therefore, these items on the Special Questions Form were designed to obtain feedback concerning revision of the seminar format.

Item 8 was concerned with general reaction to the seminar as a means of providing an opportunity for real input on the part of the participants. A majority of respondents felt the seminars gave them "an opportunity to have real input" and that "the interactions in the seminars were of personal

relevance" with 61% of the respondents selecting either "strongly agree" (15%) or "moderately agree" (46%) in response to this statement. The "neutral" response was selected by 24% of the respondents, while 15% selected either "moderately disagree" or "strongly disagree". These responses are similar to those found during the course delivery in that the responses are generally positive with a minority of respondents revealing either a neutral or dissatisfied response to the seminars. Dissatisfied respondents indicated in written comments that they felt the answers to questions were often too general or too idealistic about the realities of teaching and/or that questions were not fully answered as the panelists tended to stray from the subject. The use of classroom observations to answer questions was viewed as helpful by many respondents.

Respondents were also questioned concerning alternate means of generating questions for the live seminars. Item nine required respondents to select from among "bringing a question to class", "having a 15-minute question-generation session before each seminar", having a 5-minute intermission half-way through the seminar to generate questions", or "other" with written comments as the most helpful procedure for generating questions. The most frequent responses were to the 15-minute pre-seminar session (45%) and to the 5-minute intermission session (42%); three respondents who selected "other" suggested using both of these methods.

Item ten questioned respondents concerning the effectiveness of presenting seminars by audio signal only as compared to the current audio-visual presentation. A large majority (88%) of the respondents felt that presentations by audio signal only would be less effective than the current

procedure. These results present strong evidence for the effect of the visual component of the seminars in stimulating the interest of the participants.

Earlier in-course evaluations had revealed that while site coordinators were viewed as one of the most positive aspects of the course, participants felt the site coordinators could improve their roles as facilitators through better organizational strategies. These opinions were re-affirmed in the follow-up study. In reacting to the general statement "Do you feel the site coordinator was helpful?" 85% of the respondents checked "strongly agree" or "moderately agree". However, when asked how the services of the site coordinator might be improved, participants provided a variety of useful suggestions. Respondents indicated that site coordinators should be more familiar with the content and procedures of the course, be better organized so time is not wasted, and act as a facilitator of discussion to keep the group on target in laboratory activities. These results would suggest that while participants are generally satisfied with the site directors' role, there remains room for improvement in terms of organization and management of on-site activities.

Participants were also questioned as to their satisfaction with the option (K-3, 4-6, K-6) they had selected and their opinion concerning this division of course curriculum. The spring 1975 delivery of the diagnostic and prescriptive reading course was the first time these options were offered. As participants were not questioned concerning their satisfaction with these options in the summative evaluation, this issue was included in the follow-up study in order to obtain feedback concerning the continuation

of these options. Participant responses revealed an overwhelming satisfaction with the option chosen; only three respondents indicated they had not been satisfied with the particular option they selected. In responding to item 18, "Do you think that teachers should complete the activities of the entire program rather than the activities in selected programs (i.e., K-3, 4-6)?", 23% of the respondents replied "yes" while 77% answered "no". Many of those who responded "no" felt that completing the entire program would involve spending too much time in activities of little or no value to them. Others commented that the options were a valuable aspect of the course that is generally not available with traditional instruction. Those participants who responded in the affirmative felt that completing the activities of the entire program would provide a fuller understanding of a total reading program and would provide the teacher with knowledge of how to work with the student who is not working at his grade level in reading.

Conclusions and Implementation of Results

Results of the follow-up study provided data on three questions of interest: the attitudes of participants toward diagnostic and prescriptive reading techniques, the implementation of these techniques in the classroom, and suggestions for revision of the course based on reactions to particular instructional components.

Data concerning participants' attitudes toward diagnostic and prescriptive reading techniques revealed that participants had maintained their generally positive attitudes toward diagnostic and prescriptive reading one year and six months following the conclusion of the course. While parti-

cipants' attitudes were relatively positive upon entry into the course, a significant gain in attitudes was demonstrated in the post-course and follow-up measures with the gain being demonstrated between precourse and postcourse measures. The maintenance of these positive attitudes after having applied the techniques in the classroom provides substantial evidence for the success of the course.

Data concerning the implementation of diagnostic and prescriptive reading techniques in the classroom serve to substantiate these findings. The self-report measures indicate that participants are applying these techniques in their classrooms and are generally satisfied with the results they have had. These results not only support the success of the course, but provide evidence for the impact in-service teacher education by satellite can have on Appalachia as a region. The implementation of new and effective reading techniques in classrooms across Appalachia may be the most significant impact of the diagnostic and prescriptive reading course.

Reactions to the course and specific course components generally paralleled those found in the summative evaluation. Participants viewed the course as a positive experience which they would sign up for again if they had not already taken it. The instruction was viewed as equal or superior to instruction via regular television or a live instructor. While a small minority viewed the course as an impersonal experience, most participants felt certain aspects of the course such as the role of the site coordinator, the group size, and the opportunity to see teachers applying the techniques, compensated for this problem.

Participants indicated that the interactive seminars could be improved by more direct and practical answers to questions with panelists making an effort to apply their answers to classroom situations. A 15- minute question-generation session before each seminar was viewed as the most helpful procedure in improving the quality of questions. These suggestions are being addressed in the current delivery of the diagnostic and prescriptive reading course. The pre-seminar question-generation session is being used at all sites and the host of the seminar panelists is acting as a moderator to more fully answer participants' questions.

The services of the site coordinator were viewed as a positive factor in the course, but room for improvement was seen in organization and familiarity with procedures. Efforts were made to improve this situation by holding a two-day workshop for site directors for the spring 1977 course delivery; however, inclement weather and narrow timelines hindered training efforts.

The general satisfaction with the course option plan as indicated in the follow-up study has resulted in its continuation as an integral part of the diagnostic and prescriptive course curriculum.

Other major changes in the spring 1977 course delivery included the elimination of the four-channel reviews and the information retrieval system which had received relatively low ratings in the summative evaluation of the course. Certain course materials which had received relatively low frequencies of implementation were dropped from the curriculum; among these were the Fountain Valley Teacher Support System. The Reading Miscue Inventory was retained as part of the course curriculum at the Instructor's request as he felt this was a vital component of the course. Laboratory and ancillary materials were revised in accordance with these curriculum changes.

CAREER EDUCATION FOR SECONDARY TEACHERS

Introduction

A follow-up study was also conducted with participants in a second course delivered by the Appalachian Education Satellite Project (AESP) during its experimental phase. This was a course in career education for secondary teachers which was delivered in the fall of 1974. The follow-up study was designed to (a) measure participants' attitudes concerning career education two years following the completion of the course, (b) investigate the implementation of career education techniques in the classroom, and (c) obtain feedback on the effectiveness of various instructional components of the course.

Career education for secondary school teachers and an earlier course for elementary school teachers were designed in response to a 1970 survey conducted by the Appalachian Regional Commission which revealed that in-service training in reading and career education were viewed as priority in-service needs by teachers in Appalachia. The career education course for secondary teachers was offered in the fall of 1974. The course was designed by the Appalachian Education Satellite Project (AESP) and delivered, via ATS-6 and ATS-3 educational satellites, to 15 sites in Appalachia. A total of 247 participants completed the course requirements. (See AESP Technical Report #11 for site by site participation.)

The career education course for secondary teachers was designed to familiarize secondary teachers with career education concepts and methods

for implementing the basic principles of career education in the classroom. The format of the course differed from previous courses offered by AESP in that it did not include videotaped lessons. Instead, it consisted of sixteen one-hour live, interactive video seminars and supporting ancillary materials. This format was designed to allow the participants to modify the program to meet their individual needs. Audio feedback from participants during each seminar facilitated the adaptation of the course content to the expressed needs of the participants as the course progressed. A complete description of the design and development of course content may be found in AESP Technical Report #11. This report also presents results of summative evaluation data concerning the affective and cognitive gains of the 247 participants who completed the course requirements. The follow-up study to be reported was designed to measure participants' reactions to the course structure and content given the opportunity they had had to implement career education concepts taught in the course.

Method

Subjects

Evaluation instruments were mailed to the 247 participants who completed all course requirements in November 1976, almost two years after the completion of the course. As in the previous follow-up study, instruments were returned in the stamped, self-addressed envelope to local site coordinators who acted to follow-up on unreturned forms. Packets were subsequently mailed to the Resource Coordinating Center (RCC) at the University of Kentucky. The return rate was 20% with 49 packets returned

to the RCC; this sample of participants served as the subject group for the follow-up study. Eight subjects were dropped from the analysis of attitudes toward career education due to incorrect completion of forms.

Table 3 illustrates the number of students from each site who participated in the follow-up study. The sample is subject to bias by return rate and site distribution. The low return rate may be attributed to the two year time lag between the completion of the course and the distribution of instruments for the follow-up study as many course participants had moved out of the area during this time.

Instruments

Teacher Attitudes Toward Career Education (TACE). This instrument was designed to measure participants' attitudes toward basic concepts of career education. (See Appendix 2 for a copy of this instrument.) The 28 items on the instrument were selected on the basis of factor loadings on a factor analysis with VARIMAX rotation on the post-course administration of the instrument. The factor analysis revealed an essentially unifactorial structure, with the first factor accounting for 93.5% of the common variance. Four items on the original 32-item scale were dropped due to factor loadings of less than .40.

Participants responded to the instrument on the basis of a five-point Likert scale in which 1 = strongly disagree and 5 = strongly agree with the statement.

The instrument was used as a pre- and post-course measure of attitude change during the course delivery. Hence, its administration in the follow-up study was designed to permit comparison with these earlier results in order to examine changes in attitude toward career education over time.

TABLE 3

DISTRIBUTION OF FOLLOW-UP PARTICIPANTS BY SITE: CES

Site	Number of Participants Completing Course	Number Participating in Follow-Up Study
Fredonia, NY	17	7
Olean, NY	8	5
Edinboro, PA	16	5
LaFollette, TN	24	0
Coalfield, TN	17	0
Johnson City, TN	18	0
Norton, VA	17	1
Stickleyville, VA	12	2
Boone, NC	15	3
Cumberland, MD	17	6
Keyser, WV	15	5
McHenry, MD	18	4
Huntsville, AL	15	3
Guntersville, AL	16	5
Rainsville, AL	12	3
	N = 247	N = 49

Special Questions Form. This instrument consisted of 16 open-ended items designed to measure: (a) the degree of implementation of career education concepts into the classroom and (b) participants' reactions to the basic instructional components of the course. (See Appendix 4 for a copy of this instrument.)

Results

The follow-up study for career education for secondary teachers was designed to measure three specific research questions:

- How had participants' attitudes toward career education changed over time with the opportunity to implement the techniques in their classroom?
- How did participants feel about basic instructional components of the career education course two years after its completion and what suggestions did they have for revision?
- Had participants been able to implement techniques they had learned in the career education course in their classrooms and which techniques had proven most successful in this process?

Attitudes Toward Career Education

In order to obtain answers to the first research question concerning participants' changes in attitude toward career education over time, data from the Teachers' Attitudes Toward Career Education instruments were analyzed in a multivariate analysis of variance (MANOVA) design. Data were analyzed with a factor for RESA triangles and a factor for reception sites nested within RESA triangles. These factors are based upon the configuration of the AESP reception network in five RESA triangles each containing three reception sites. This design is consistent with previous analyses of AESP courseware delivery and in keeping with previous findings for significant effects for sites nested within triangles. The third factor in the design consisted of a repeated measures factor for the three administrations of the instrument (pre, post, and follow-up).

Results of the multivariate analysis for 4 triangles by 3 sites within triangles by 3 administrations are presented in Table 4. (Only four triangles were included in the follow-up analysis as no forms were returned

TABLE 4

MANOVA FOR PRE-, POST-, AND FOLLOW-UP ADMINISTRATIONS
OF THE AFFECTIVE INSTRUMENT FOR CES COURSE
N=41

Source	df	MS	F	p <
Between Subjects	41			
Triangles (T)	3	1.42	.54	n.s.
Sites within Triangles (S:T)	8	2.64	.46	n.s.
Error between	29	5.68		
Within Subjects	82			
Administrations - Linear (A_L)	1	.02	.01	n.s.
Administrations - Quadratic (A_Q)	1	8.38	19.49	.0002
A_L x T	3	.62	.38	n.s.
A_Q x T	3	.15	.43	n.s.
A_L x S:T	8	1.65	1.24	n.s.
A_Q x S:T	8	.36	.83	n.s.
Error within (linear)	29	1.32		
Error within (quadratic)	29	.43		

from the Tennessee RESA triangle.) A significant main effect was found for administrations, but not for triangles or sites within triangles. The linear tend for administrations was not significant; however, the quadratic trend was ($p < .01$). Inspection of the data indicates that while participants' attitudes rose while taking the course as indicated by scores on the post-course measure, attitudes fell almost to the pre-course level in the interim between the post-course administration and the follow-up. This trend is graphically depicted in Figure 2. Means for the pre-, post-, and follow-up administrations were 3.86, 4.40, and 3.88, respectively. The 3.86 and 3.88 scores reflect a moderately positive attitude toward career education; however, the improvement in attitudes reflected in the immediate post-course administration was not maintained. Possible explanations for this drop in attitudes may be seen in the difficulty some participants expressed in the implementation of certain concepts due to a lack of support from local school administrations.

Special Questions Form

In order to answer the second two research questions posed in the follow-up study concerning participants' implementation of career education concepts in the classroom and their reactions to the basic instructional components of the course, responses to the Special Questions Form were analyzed. As the items on this form were generally open-ended, responses were analyzed through tabulation of certain categories of responses rather than through standard statistical procedures. Results are reported in these terms with representative comments cited.

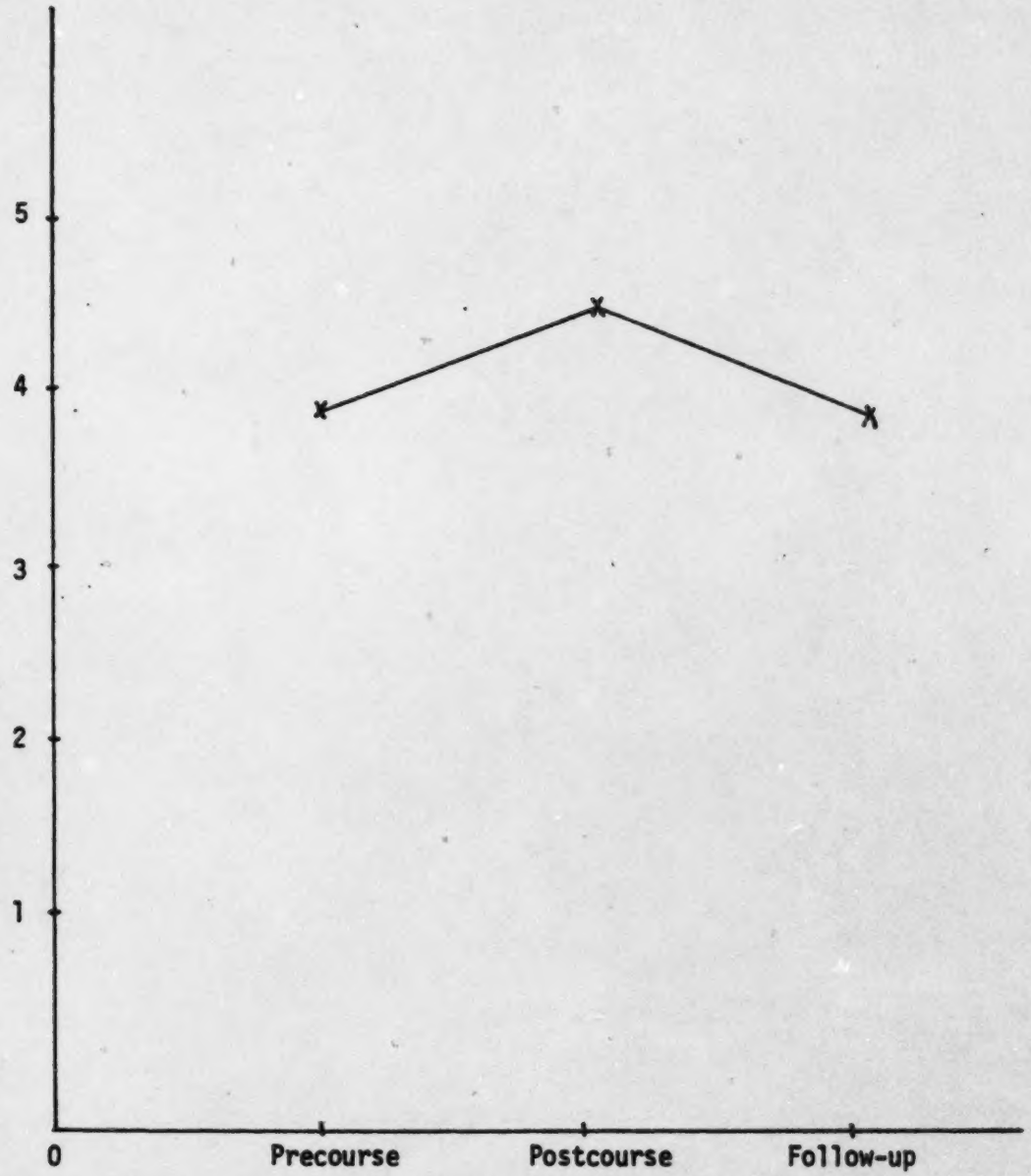

Fig. 2 -- Mean Item Scores for Three Administrations of Attitude Toward Career Education Instrument (N= 41)

Implementation of career education concepts. When respondents were questioned as to the general utility of skills they had learned in the course in their present job, a substantial proportion indicated that they had learned many skills that are potentially useful in their present jobs. Seventy-two percent of the respondents checked this option; 11% indicated they had learned many useful skills which were not applicable in their present jobs, while 17% felt they had not learned many useful skills.

In responding to the frequency with which they used these skills, most participants indicated that they used the techniques taught in the course often (24%) or occasionally (28%). Only 8% of the participants responded rarely or never. Twenty-four percent indicated they were not teaching this year.

Items 4, 5, and 6 on the Special Questions Form were concerned with which techniques were particularly useful or, conversely, required some difficulty to implement. In responding to item four, participants mentioned a variety of techniques such as interest inventories, student reports of jobs in the areas of study, field experiences, and career awareness techniques which had been successfully implemented in the classroom. Most participants who responded to this item had found the techniques to be very effective and had received favorable student reactions. However, responses to items five and six indicated that some participants had encountered difficulties in implementing certain techniques. Thirty-five percent of the participants responding to item five indicated that they had found some of the techniques presented in the course to be of little or no use to them. Comments suggested that course content was not directed to specific

techniques and applications and/or that some of the techniques which were presented were difficult for small, rural school systems to implement. Responses to item six further confirmed this latter difficulty. Forty percent of the respondents indicated difficulty in implementing certain techniques due to lack of materials and/or cooperation from local school administrators. Nineteen percent of the respondents specifically mentioned the lack of materials in their local school districts as a substantial hindrance in the implementation of career education. Others mentioned difficulties with school administrators such as the prohibition of field trips and career awareness activities off the school grounds.

Item seven was concerned with the implementation of ideas generated by other teachers during the course of instruction. Fifty percent of the respondents indicated they had been able to use particular techniques suggested by other teachers in the course. These activities involved learning centers, posters, and specific games and role-playing situations. The percentage of participants using other teacher's activities is smaller than that which was found with the reading course (81%); however, this may be due to basic differences in career education and reading as teaching areas. As reading is a subject that has virtually always been taught and is traditionally viewed as an integral part of the curriculum, many teachers have undoubtedly generated activities and techniques for teaching reading which they can share with other teachers. This is not likely to be the case with career education which is a relatively new area of interest in the schools.

In summary, data concerning the implementation of career education concepts in the classroom presents a mixed picture. A substantial majority (72%) felt they had learned skills which were useful in their present job, and did find occasions to apply these techniques in the classroom. Many expressed positive reactions to the experiences. However, some participants had encountered difficulties in implementing techniques due to problems with school administrators and/or the inappropriateness of the techniques for their school districts.

Attitudes toward instructional components of the career education course. Items eight through sixteen on the Special Questions Form were concerned with participants' reactions to various aspects of the course delivery. A general reaction to the course was obtained in response to item twelve which stated: "Knowing what you know about the quality and procedures of the course would you sign up for it now if you had not already taken it?" Fifty-nine percent of the participants responded "yes" while 10% responded "no." Thirty-one percent selected this alternative "Qualified yes, I would sign up for it if the following changes were made." Changes suggested included showing more career education programs in action rather than talking about them, better trained site coordinators, and less "busy" work on in-class and outside-class activities.

Participants were also questioned concerning whether they felt the course was an impersonal experience due to the absence of an on-site instructor. Forty-six percent of the respondents felt that it was, checking "moderately agree" or "strongly agree" to the statement. Forty percent indicated they felt it was not an impersonal experience by checking

"moderately disagree" or "strongly disagree". The neutral response was selected by 14% of the participants. Those who felt the course was an impersonal experience indicated that they were bothered by the difficulty in asking the instructor(s) questions and by the lack of interaction. Others felt that this was not a matter of concern; the important point was to learn something.

In contrast, a majority of the respondents believed that the use of the satellite for course delivery was superior to that which they would have obtained via regular TV or a live instructor. In comparing satellite delivery to regular television, 57% of the respondents believed the satellite delivery was somewhat or much better while 35% felt both were about the same. Only 8% felt that watching the programs via regular television would be superior to the satellite delivery. Fifty-six percent of the participants felt that the satellite delivered course was somewhat or much better than listening to a live instructor, while 29% believed they were both about the same. These results coincide with those found in previous course deliveries by AESP.

In addition to reacting to these general aspects of the course, participants were asked to react to two specific instructional components of the course: the interactive seminars and the role of the site coordinators. As the interactive seminars constituted the central instructional components of this course, participants' reactions to the format were of particular interest.

Participants were asked to react to the statement that "the seminars gave you an opportunity to have real input and that the interactions in the seminars were of personal relevance to you." Sixty-four percent of the respondents indicated moderate or strong agreement with the statement, while 16% expressed moderate or strong disagreement. The neutral response was selected by 20% of the participants. Positive comments centered on the utility exchange of ideas the seminars provided. Suggestions for improvement included answering more questions, facilitating better coordination between sites in questioning procedures, and including on the seminar panel more people who had actually implemented career education programs.

In reacting to alternative methods of generating questions on-site for the seminars, participants seemed to prefer having a 15-minute intermission half-way through the seminar to generate questions. This alternative was selected by 49% of the respondents. Another popular alternative concerned having a 15 minute question-generation session prior to the seminar. Thirty-eight percent of the respondents chose this alternative. Only 6% of the participants felt bringing a question to class was a viable alternative. Apparently, on-site group discussions of questions was a preferred approach, with the discussion occurring mid-way through the seminar when the first half of the seminar could serve as the impetus for discussion. Several participants confirmed the importance of on-site group discussion by indicating that more time was needed to discuss questions locally. Other useful suggestions included picking a group spokesperson during the intermission discussion to present the questions for the site and, at the conclusion of the seminar, having the site coordinator identify questions raised in the minds of the students as a result of the seminar. These questions could then be discussed on-site during the next session.

When questioned concerning the effectiveness of presenting seminars by audio signal only rather than using the current audio-video presentation, a large majority (94%) indicated the audio-only presentation would be somewhat or much less effective. These results are consistent with previous findings concerning participants' reactions to audio-only presentations in other AESP course deliveries.

Participants were then questioned concerning a second instructional component of the course, the role of the site coordinator. Respondents indicated general satisfaction with the helpfulness of the site coordinator with 84% of the participants indicating agreement that the site coordinator was helpful. Forty-three percent of the respondents checked "strongly agree" while 41% checked "moderately agree." However, 24% of the respondents specifically commented that the site coordinators needed more training in directing and organizing activities and discussions. A more thorough understanding of the organization of the course, scheduling of assignments, and implementation of on-site activities appear to be desirable. Other suggestions included having the site coordinator prepare the students for the format of the seminars by explaining what will take place and providing site coordinators with pre-planned, outlined topics for discussion to improve their role as a facilitator of group discussion.

Conclusions

Three research questions were examined in the follow-up study for career education: the attitudes of participants toward career education, the implementation of the techniques in the classroom, and reactions to particular instructional components of the course.

Data concerning participants' attitudes toward career education as measured in pre-, post-, and follow-up administrations indicated that while participants' attitudes had risen on the immediate post-course administration, these attitudes were not maintained at the time of the follow-up. Attitude scores for the follow-up measure and the pre-course administration were 3.88 and 3.86 respectively. It should be noted that these scores represent a mildly positive attitude toward career education on a 5-point Likert scale: however, completion of the course in career education seemed to have no long-term effect in maintaining the more positive attitudes demonstrated in the immediate post-course measure (4.40).

Data concerning the implementation of career education concepts in the classroom may provide some clues as to the reason for the decline in attitudes in the follow-up measure. Results indicated participants felt they had learned many useful skills in the course which they were able to apply on occasion in their classroom. Those who had used career education techniques had positive feelings concerning the experience. However, a substantial proportion of respondents had encountered difficulties in applying the techniques either through lack of materials or lack of support from school administrators. These difficulties may have acted to reduce the enthusiasm for career education which respondents had felt upon completion of the course.

The difficulties encountered in implementation are an obvious problem in a relatively new curriculum area such as career education. Again, the comparison with reading as a traditional component of the school curriculum is apropos. Participants in the diagnostic and prescriptive reading course may have found the techniques easier to implement as they required little disruption or change in the basic school structure and focus. This was also true with career education. These findings would suggest a need to educate school administrators, the need for career education in the schools and the means for adapting and maintaining a flexible school environment in which new areas of curriculum may be tested.

Participants' reactions to the course and specifc instructional components were generally positive and paralleled the opinions expressed in the summative evaluation. (See AESP Technical Report #11.) Most respondents viewed the course as a positive experience and one in which they would enroll again if they had not already taken it. The instruction was viewed as equal or superior to instruction via regular TV or a live instructor. Some participants were bothered by the impersonal nature of the course and commented on the lack of personal interaction and difficulty in asking questions of the instructor(s). This opinion, while not that of a majority of respondents, was stronger than that found in the follow-up study of the diagnostic and prescriptive reading course. As fewer participants indicated receiving ideas from other teachers in the career education course than in the reading course, it may be that the lesser degree of on-site, group interactions increased the impersonalization of the career education course. Small group discussions on-site are frequently viewed by AESP participants

as a vital, strong part of the course; it appears these activities also play an important role in making the course a more personal experience to participants.

A majority of participants felt the seminars had allowed them to have real input into the course. A 5-minute intermission for the generation of questions half-way through the seminar was viewed as the preferred strategy for generating questions. The group discussion of questions and the use of the first half of the seminar as an impetus to orient the participants to the nature of the seminar were apparently significant factors.

The services of the site coordinator were viewed as helpful by a large majority of participants; however, many respondents mentioned the need for more adequate training of site coordinators in the organization of the course. Specific suggestions included pre-planned, outlined topics for discussion to facilitate the site coordinators' role in group discussions and the need for the site coordinator to play an active role in preparing the students for the seminar format. Another useful suggestion involved having a brief discussion of important questions raised in the minds of the students following the seminar. These issues could then provide the basis for an on-site group discussion at the next meeting.

In summary, the general level of participant reaction to the career education course in the follow-up study was good. Some procedures were being implemented in the schools, however, others had encountered some problems. These problems may have contributed to the decline in participants' attitudes toward career education from the post-course measure.

SUMMARY AND CONCLUSIONS

The results of these follow-up studies concerning participants' attitudes and reactions to two courses delivered during the experimental phase of AESP operations have been presented in this report. These studies were designed as part of a planning effort by AESP in preparation for its continuing expanded operation in serving the needs of the people in the Appalachian region. Through the findings of these studies, vital input could be obtained from previous course participants on the revision of previous course offerings as well as the general AESP course structure.

Subjects in the follow-up studies consisted of 108 participants in one of two AESP courses, Diagnostic and Prescriptive Reading Instruction and Career Education for Secondary Teachers. Results of these studies took two forms: feedback which was specific to the particular course content and that which applied to the general AESP course structure and administration. Feedback concerning the particular content of a course has been discussed in the previous chapters and will not be reviewed here, as these suggestions are too specific to summarize in a few statements. This data has been and will continue to be used for purposes of course revision as these courses are reviewed for future delivery.

A few general conclusions which may be drawn from the findings presented here will be summarized. First, a positive reaction and attitude of support was revealed for the AESP course offerings. These attitudes were revealed through participants' ratings of instruction by satellite as compared to other modes of instruction, their willingness to repeat the

experience, their expressions concerning the utility of techniques learned, and their implementation of these techniques in the classroom. These positive reactions to AESP operations provide further documentation for the success of the experimental phase of the AESP. In addition, the degree of implementation of instructional techniques serve to validate the far-reaching effects of the AESP; through in-service training of professionals and the subsequent implementation of these techniques a wide variety of the Appalachian population is served.

Secondly, the data provided valuable feedback concerning the long-term effects of course participation. These effects appear to be contingent upon the degree to which the course is directed toward activities which can be implemented in the classroom. Support services for this implementation to individual participants and to the school systems themselves could be a future direction for AESP activities. This type of support service for implementation will be a part of a course scheduled to be delivered over the AESP system in the fall of 1977. The course is designed to instruct classroom teachers in techniques for mainstreaming children with special needs into the regular classroom. Support services will be provided to participants and schools through the outreach component of Project PUSH (Parents Understanding Student Handicaps) in conjunction with the AESP. Support services will consist of consulting and providing assistance and printed materials to individual teachers, administrators and school systems upon request. Future activities of this type might be considered with other new areas of school curriculum such as career education.

Finally, the results of these studies have provided feedback on the modification of AESP course delivery and administration. New activities in conjunction with interactive seminars are suggested. Participants' approaches to seminars might be improved through a more direct orientation to the seminar format by site directors. Different formats for on-site question generation, such as a structured fifteen-minute question generation session prior to the seminar and a five-minute intermission half-way through the seminar, will be tested. On-site discussions concerning questions raised by the seminar might serve as a useful follow-up of seminar interactions.

In both the supervision of the seminar activities and the general administration of the course, site directors need to receive more structured training. This problem has, no doubt, been somewhat alleviated as site directors have become more familiar with the AESP course format. However, new site directors must receive training in the intricacies of the course so as to become thoroughly familar with course procedures and content. To improve their role as facilitators of discussion, site directors might be trained in discussion techniques and provided with summaries of major questions which should be covered in group discussions. In this way site directors who are not content experts can act to facilitate participants' learning.

Thus, the feedback from these follow-up study has provided important data which can be used in determining AESP directions in its expansion phase. Evaluation data from the experimental phase, results of a wide-ranging needs assessment of the Appalachian region, and on-going formative evaluation activities such as the follow-up studies described in this report will then serve as the basis for future AESP activities.

Appendix 1

Appalachian Education Satellite Project
Resource Coordinating Center
Evaluation Component
306 Frazee Hall, University of Kentucky
Lexington, Kentucky 40506

TEACHER ATTITUDES TOWARD READING INSTRUCTION (TARI)

Instructions

Mark all answers on the separate answer sheet -- do not write on the test itself. In the blank after the word "School" at the top of the answer sheet write the name of the course you are taking. In the blank after the word "Test" write the abbreviated name of the test. In the section labeled "Student Number" located in the lower right-hand corner of the answer sheet, write your 4-digit student number in the first four boxes. Place a heavy horizontal line in the appropriate space in the column under each digit of your student number.

Indicate your answers to the items by placing a heavy vertical line in the column beside the appropriate item number on the separate answer sheet. Be sure the item number on the answer sheet matches the item number on the test.

Mark: 5) if you strongly agree with the statement

4) if you moderately agree

3) if you feel neutral

2) if you moderately disagree

1) if you strongly disagree

Use a soft-lead (#2) pencil to mark the answer sheet -- do not use a pen or ball-point. Be sure your mark fills the entire block of the response you wish to make. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other marks on the answer sheet.

Please answer as truthfully as possible. Your answers do not affect your grade in the course, but help us to assess the effectiveness of the course and suggest improvements.

1. Kindergarten teachers do not have to worry about teaching students to understand stories.

2. The reason for most student reading problems is inadequate instruction.

3. If a class is large, there's no way to work with individuals.

4. A third-grade teacher only needs third-grade instructional materials.

5. Kindergarten teachers should help children develop reading readiness skills.

6. A student is a good reader if he can read every word correctly.

7. Not using every page in the workbook is wasteful.

8. Students should not be corrected when they make oral reading errors.

9. Time spent diagnosing could be better spent instructing.

10. If you don't have enough books for all your students, you cannot effectively use a set of materials.

11. Diagnosing student reading problems is the responsibility of the teacher, rather than the school administration.

12. Scores on standardized tests provide adequate information for instruction.

13. It is worse to be 6 months behind in first grade than it is to be 6 months behind in third grade.

14. Informal tests are better than standardized tests for placing students at appropriate instructional levels.

15. Teaching students to understand what they read is more important than to sound out the words.

16. Prescriptive instruction is the best way to teach reading.

17. There's nothing a teacher can do to develop reading readiness in students.

18. It is more important that a student understands what he reads than that he reads without making miscues.

19. Diagnosing word-recognition weaknesses is more trouble than it's worth.

20. Information systems linking diagnosis and instruction are effective ways to plan instructional activities.

21. Vocabulary should be taught through real life experiences.

22. A child is either ready to learn to read, or he isn't.

23. Grouping children on the basis of common skill needs is better than grouping them on the basis of instructional level.

24. Students in your class should all read the same thing, so no one feels bad.

25. An analysis of oral reading miscues is more trouble than it's worth.

26. Reading should be integrated with all other classroom activities.

27. Achievement tests are good diagnostic instruments.

28. Reading instructions should focus more on reconstructing meaning from the written page than pronouncing words.

29. Low socio-economic level and physical hindrances account for most reading problems.

30. If teachers would follow basal reader procedures with every student, more students would learn to read.

31. The quality of instruction in lower reading groups should compensate for what you say to a student when you put him in the lower group.

32. To compensate for poor teaching methods, teachers often spend too much time teaching reading.

33. One responsibility of the primary reading teacher is to expose students to different kinds of experiences.

34. Teachers only need to diagnose student needs in the fall of the year.

35. The emphasis given phonics changes according to student needs.

36. It is more important to teach students the meaning of new words than to teach them new uses for words already in their vocabulary.

AESP/EVAL/5/29/74/mt

Appendix 2

Appalachian Education Satellite Project
Resource Coordinating Center
Evaluation Component
306 Frazee Hall, University of Kentucky
Lexington, Kentucky 40506

TEACHER ATTITUDES TOWARD CAREER EDUCATION (TACE)

Instructions

Mark all answers on the separate answer sheet -- do not write on the test itself. In the blank after the word "Test" at the top of the answer sheet write the abbreviated name of the test. In the section "Student Number" in the lower right-hand corner write your 4-digit student number in the first four boxes. Place a heavy horizontal line in the appropriate space in the column under each digit of your student number.

Indicate your answers to the items by placing a heavy vertical line in the column beside the appropriate item number on the separate answer sheet. Be sure the item number on the answer sheet matches the item number on the test.

Mark: 5) if you strongly agree with the statement

4) if you moderately agree

3) if you feel neutral

2) if you moderately disagree

1) if you strongly disagree

Use a soft-lead (#2) pencil to mark the answer sheet -- do not use a pen or ball-point. Be sure your mark fills the entire block of the response you wish to make. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other marks on the answer sheet.

Please answer as truthfully as possible. Your answers do not affect your grade in the course, but help us to assess the effectiveness of the course and suggest improvements.

1. The school program should include career development.
2. Career education should be a continuous, life-long process.
3. Information about careers should be integrated with school curriculum.
4. The community is an excellent resource to use in a career education program.
5. I am willing to take the time to find community resources for a career education program.

6. Teaching plans should be organized around what people do in their occupations.

7. I consider what people do in their occupations when I organize my teaching plans.

8. A commitment from the school administration is necessary for a successful career education program.

9. Schools have the responsibility to help students develop career objectives.

10. Students should have experience in the world of work before leaving school.

11. The school curriculum should be related to the career goals of the student.

12. Parents should be aware of career education experiences occurring in the school system.

13. Helping children develop occupational awareness should be emphasized from kindergarten through grade six.

14. Children in elementary school are too young to start thinking about career possibilities.

15. The school guidance personnel should have responsibility for career education.

16. The classroom teacher should be responsible for career education.

17. Career education is just another fad that will soon be forgotten.

18. Career education will help students make realistic career choices.

19. Students should be permitted to miss regular classes in order to go on field trips.

20. It is important for children to be taught a work ethic.

21. I feel that career education should be included in the curriculum experiences of each child.

22. A commitment from the classroom teacher is needed for a successful career education program.

23. I am aware of what my colleagues are doing in the area of career education.

24. I help my students develop occupational awareness through the use of film strips, field trips, and speakers.

25. I have discussed at length career education procedures with my colleagues.

26. Subject matter lesson plans should include career information.

27. I consider job awareness when devising my lesson plans.

28. An elementary teacher should know the community employment needs.

29. Enough emphasis is already placed on career education in the schools.

30. Career education in the elementary school is futile since a person will change his mind several times before picking a lifetime career.

AESP/EVAL/5/24/74/mt

Appalachian Education Satellite Project
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

SPECIAL QUESTIONS FORM

This form contains several very important questions about the Diagnostic and Prescriptive Reading Instruction course which you took in the spring of 1975. These items provide information about a number of questions we have been asked by persons and agencies interested in the Appalachian Education Satellite Project.

We are planning to reoffer the DPRI course which you took and your comments will be used for revision purposes. It is important that you complete this form and return it in the envelope provided. Please do not fold your answer sheet. You are to respond anonymously, but please indicate your job, the grade level of the students you work with, and the subject area you teach (if applicable).

Job _____

Grade Level _____

Subject area taught _____

1. Why did you sign up for the course? Choose the one most applicable answer.

___ (a) Needed it for certification
___ (b) Interested in satellite experiment
___ (c) Free credit and books
___ (d) Encouraged by principal or supervisor
___ (e) Encouraged by fellow teacher or friend
___ (f) Really interested in subject matter of course
___ (g) Other (please specify)

_____

_____

2. Select the alternative that best describes your reaction to the course you took.

___ (a) I learned many skills that are useful in my present job.
___ (b) I learned many useful skills that are not applicable in my present job.
___ (c) I did not learn many useful skills.

3. How often do you apply any of the teaching skills or techniques presented in the course in your classroom?

___ (a) Often
___ (b) Occasionally
___ (c) Rarely
___ (d) Never
___ (e) I am not teaching this year

4. If you answered a, b, or c to question 3 will you please briefly explain (a) what techniques you are using; (b) how effective you feel they are; (c) the reaction of your students to the techniques you have employed, and (d) the extent to which you feel your students have benefited from the new techniques (mention any relevant results on standardized tests).

(a) _____

_____

_____

_____

(b) _____

_____

(c) _____

_____

(d) _____

_____

5. Were any of the particular techniques presented in the course of little or no use to you? ___ Yes ___ No
If yes, please specify the technique(s) and explain why it was (they were) not useful. _____

_____

_____

6. Did you try to implement any of the techniques and find that you did not have sufficient information/materials to implement it as successfully as you would like? ___ Yes ___ No
If yes, please specify the technique(s) and explain the area of insufficient information/materials _____

_____

_____

7. Did you use any of the ideas that were generated by other teachers in the course in your instruction? ___ Yes ___ No
If yes, please specify the technique _____

_____

_____

8. Did you feel the seminars gave you an opportunity to have real input and that the interactions in the seminars were of personal relevance to you?

___ (a) Strongly agree
___ (b) Moderately agree
___ (c) Neutral
___ (d) Moderately disagree
___ (e) Strongly disagree

Comments or suggestions _____

_____

_____

9. In generating questions for the live seminars, which procedures do you think would be most helpful?

___ (a) Bringing a question to class
___ (b) Having a 15 minute question-generation session before each seminar
___ (c) Having a 5 minute intermission half-way through the seminar to generate questions
___ (d) Other, please specify _____

10. How would presenting the seminars by audio signal only (no picture) compare to the audio-visual presentations?

___ (a) Much more effective
___ (b) Somewhat more effective
___ (c) About the same
___ (d) Somewhat less effective
___ (e) Much less effective

11. Did you feel the site coordinator was helpful?

___ (a) Strongly agree
___ (b) Moderately agree
___ (c) Neutral
___ (d) Moderately disagree
___ (e) Strongly disagree

How could the services of the site coordinator be improved? _____

_____

_____

_____

12. Knowing what you know about the quality and procedures of the course would you sign up for it now if you had not already taken it?

___ (a) Yes
___ (b) No
___ (c) Qualified yes, I would sign up for it if the following changes were made: _____

_____

_____

13. Do you feel that you would have enjoyed the course as much if there were no satellite used and .....

(a) You watched the programs via regular TV:
___ Satellite much better
___ Satellite somewhat better
___ Both about the same
___ Regular TV somewhat better
___ Regular TV much better

(b) You listened to a live instructor:
___ Satellite much better
___ Satellite somewhat better
___ Both about the same
___ Regular TV somewhat better
___ Regular TV much better

14. Did you feel that the course was an impersonal experience?

___ (a) Strongly agree
___ (b) Moderately agree
___ (c) Neutral
___ (d) Moderately disagree
___ (e) Strongly disagree

Comments or suggestions _____

_____

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15. Would you be interested in participating in additional follow-up seminars that explore in greater detail specific ideas presented in the course?

___ Yes ___ No

If yes, how many seminars would you be interested in attending?

___ 1 ___ 2 ___ 3 ___ more than 3 (If so, how many? ___)

16. What specific topics would you like to see covered in the follow-up seminars?

_____

_____

_____

17. Which option did you choose for the course?

___ K-3
___ 4-6
___ K-6

Were you satisfied with the option you chose? ___ Yes ___ No
Please explain _____

_____

_____

18. Do you think that teachers should complete the activities of the entire program rather than the activities in selected programs (i.e., K-3, 4-6)?
___ Yes ___ No
Please explain _____

_____

_____

DMM/mt/10/29/76

Appalachian Education Satellite Project
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

SPECIAL QUESTIONS FORM

This form contains several very important questions about the Career Education in the Secondary Schools course which you took in the fall of 1974. These items provide information about a number of questions we have been asked by persons and agencies interested in the Appalachian Education Satellite Project.

We are planning to reoffer the Career Education course which you took and your comments will be used for revision purposes. It is important that you complete this form and return it in the envelope provided. Please do not fold your answer sheet. You are to respond anonymously, but please indicate your job, the grade level of the students you work with, and the subject area you teach (if applicable).

Job _____

Grade Level _____

Subject area taught _____

1. Why did you sign up for the course? Choose the one most applicable answer.

___ (a) Needed it for certification
___ (b) Interested in satellite experiment
___ (c) Free credit and books
___ (d) Encouraged by principal or supervisor
___ (e) Encouraged by fellow teacher or friend
___ (f) Really interested in subject matter of course
___ (g) Other (please specify)

_____

_____

2. Select the alternative that best describes your reaction to the course you took.

___ (a) I learned many useful skills that are potentially useful in my present job.
___ (b) I learned many useful skills that are not applicable in my present job.
___ (c) I did not learn many useful skills.

3. How often do you apply any of the teaching skills or techniques presented in the course in your classroom?

___ (a) Often
___ (b) Occasionally
___ (c) Rarely
___ (d) Never
___ (e) I am not teaching this year

4. If you answered a, b, or c to question 3 will you please briefly explain (a) what techniques you are using; (b) how effective you feel they are; (c) the reaction of your students to the techniques you have employed, and (d) the extent to which you feel your students have benefited from the new techniques (mention any relevant results on standardized tests).

(a) _____

_____

_____

_____

(b) _____

_____

(c) _____

_____

(d) _____

_____

5. Were any of the particular techniques presented in the course of little or no use to you? ___ Yes ___ No
If yes, please specify the technique(s) and explain why it was (they were) not useful. _____

_____

_____

6. Did you try to implement any of the techniques and find that you did not have sufficient information/materials to implement it as successfully as you would like? ___ Yes ___ No
If yes, please specify the technique(s) and explain the area of insufficient information/materials _____

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7. Did you use any of the ideas that were generated by other teachers in the course in your instruction? ___ Yes ___ No
If yes, please specify the technique _____

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___ (e) Strongly disagree

Comments or suggestions _____

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9. In generating questions for the live seminars, which procedures do you think would be most helpful?

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10. How would presenting the seminars by audio signal only (no picture) compare to the audio-visual presentations?

___ (a) Much more effective
___ (b) Somewhat more effective
___ (c) About the same
___ (d) Somewhat less effective
___ (e) Much less effective

11. Did you feel the site coordinator was helpful?

___ (a) Strongly agree
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___ (c) Neutral
___ (d) Moderately disagree
___ (e) Strongly disagree

How could the services of the site coordinator be improved? _____

_____

_____

_____

12. Knowing what you know about the quality and procedures of the course would you sign up for it now if you had not already taken it?

___ (a) Yes
___ (b) No
___ (c) Qualified yes, I would sign up for it if the following changes were made: _____

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13. Do you feel that you would have enjoyed the course as much if there were no satellite used and .....

(a) You watched the programs via regular TV:
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___ Regular TV somewhat better
___ Regular TV much better

(b) You listened to a live instructor:
___ Satellite much better
___ Satellite somewhat better
___ Both about the same
___ Regular TV somewhat better
___ Regular TV much better

14. Did you feel that the course was an impersonal experience?

___ (a) Strongly agree
___ (b) Moderately agree
___ (c) Neutral
___ (d) Moderately disagree
___ (e) Strongly disagree

Comments or suggestions _____

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15. Would you be interested in participating in additional follow-up seminars that explore in greater detail specific ideas presented in the course?

___ Yes ___ No

If yes, how many seminars would you be interested in attending?

___ 1 ___ 2 ___ 3 ___ more than 3 (If so, how many? ___)

16. What specific topics would you like to see covered in the follow-up seminars?

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